



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,389	11/25/2003	Masahiko Hatanaka	MAT-8475US	1655
23122 7590 06/15/2007 RATNERPRESTIA P O BOX 980			EXAMINER	
			DANG, DUY M	
VALLEY FOR	GE, PA 19482-0980		ART UNIT	PAPER NUMBER
			2624	
		•		
			· MAIL DATE	DELIVERY MODE
•			06/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/721,389	HATANAKA ET AL.				
Office Action Summary	Examiner	Art Unit				
•	Duy M. Dang	2624				
The MAILING DATE of this communication app		·				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICAT 36(a). In no event, however, may a reply vill apply and will expire SIX (6) MONTHS cause the application to become ABAND	FION. be timely filed from the mailing date of this communication. FONED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>25 November 2003</u> .						
•	·					
,	<del>/</del>					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims		·				
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-11</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>11/25/03</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Of	ffice Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priori</li> </ul>	s have been received. s have been received in Appli ity documents have been rec	ication No				
application from the International Bureau	* **	ata and				
* See the attached detailed Office action for a list	of the certified copies not rec	eived.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summ					
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date1/25/03+9/16/05.</li> </ul>	Paper No(s)/Mi 5) Notice of Inform 6) Other:	ail Date nal Patent Application				

## **DETAILED ACTION**

1. Applicant's preliminary amendment filed on November 25, 2003 has been entered and made of record. Currently, claims 1-11 are pending.

## Drawings

2. Figures 5-6 should be designated by a legend such as -- Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. Furthermore, the "Haffman" shown at S22 of figure 2, S63 and S66 of figure 6 ought be changed to "Huffman".

## **Specification**

3. The disclosure is objected to because of the following informalities: At page 2, line 13, insert "and" between the "input still image" and "a second memory 54B". Appropriate correction is required.

# Claim Objections

4. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. In this case, claim 6 is an apparatus type claim which depends

Art Unit: 2624

from claim 7 which is a method claim. Furthermore, claim 6 does not refer back to the preceding claim. For proper examination on the merit, claim 6 is assumed to be a dependent claim from claim 5.

# Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "said polynomials" (plural) in line 2. There is insufficient antecedent basis for this limitation in the claim. It ought to be read "said polynomial".

#### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Bracamonte et al. (USPN 6,668,089. Art of record, IDS filed on 9/16/2005, referred as Bracamonte hereinafter).

Application/Control Number: 10/721,389

Art Unit: 2624

Regarding claim 1 as a representative claim, Bracamonte teaches an image data compressing apparatus (see figure 1) comprising: an image data compressor for compressing image data input thereto at first and second compression rates to produce first and second compressed data, respectively (see compression ratios CR<sub>1</sub> and CR<sub>2</sub> depicted at 11 and 15 of figure 1); an approximate-expression selector having an approximate-expression table (i.e., the representation shown at column 6 lines 1-6 in together with figures 2a-2d and 4a-4d refer to the so called "approximate-expression table") including a plurality of approximate expressions corresponding to a plurality of sample data sizes (see column 6 lines 1-10, equations shown at column 4 line 25 to column 5 line 10, column 1 lines 65-68 for definition of CR, and figures 2a-2d and 4a-4d:  $m_1$  to  $m_6$  and constant values shown at column 6 lines 1-10 refers to the so called "approximate expressions". Also the CR1 includes claimed "data size") see Huffman table depicted as S63 of figure 6. In addition, the coefficients m and b of the straight line equation represented in figures 2a-2d and 4a-4d refer to the so called "expressions" because such straight line equation is also a polynomial equation. This reasonable interpretation is consistent with applicant's disclosed page 7 lines 23-25 [note that claimed polynomial does not necessarily invoke quartic polynomial therefore examiner is entitled to reasonable broad interpretation), respectively, said approximate-expression selector selecting an approximate expression from said plurality of approximate expressions, said first approximate expression corresponding to a first sample data size nearest a data size of said first compressed data among said plurality of sample data sizes, each of said plurality of approximate expressions indicating a change of a data size in response to a compression rate (see discussion pointed out above and column 5 line 60 to column

Application/Control Number: 10/721,389

Art Unit: 2624

7 line 20); and a compression rate determining unit for determining said second compression rate based on said selected approximate expression (see item 15 of figure 1).

Regarding claim 7, it is noted that this claim is a method claim reciting the features called for in claim 1 above. Thus, claim 7 is also rejection for the same reasons as above.

Regarding claims 2-3 and 8, it is noted these claims further require "polynomial" which is already discussed in the rejection of claims 1 and 7 above.

Regarding claims 4 and 9, Bracamonte further teaches wherein at least one of said plurality of sample data sizes is not greater than a target data size (see figures 2a-2d and 4a-4d. Note CR1 and CR2 in figures 2a-2d are not greater than CR<sub>T</sub> and CR<sub>1</sub> and CR<sub>V</sub> in figures 4a-4d are not greater than CR<sub>T</sub>).

Regarding claims 5 and 10, Bracamonte further teaches a memory for storing said input image data (see column 1 lines 15-17); and wherein said image data compresser compresses a portion of said image data stored in said memory at said first compression rate to produce said first compressed data (see item 11 of figure 1 and column 3 lines 1-4. While Bracamonte disclose memory for input image data and partitioning image into blocks, Bracamonte does not explicitly disclose to store a portion of said input image data. However, such storing a portion of input image data is inherently included in Bracamonte in order for 8x8 pixel blocks of image input data of Bracamonte to be compressed).

Regarding claims 6 and 11, the advanced statements as applied to claim 5 above are incorporated herein. Bracamonte further teaches a plurality portion of said image data (see 8x8 pixels blocks at column 6 lines 1-4).

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Matsunoshita (USPN 5,608,654) is an example of image compression having a plurality of compression rates.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

dmd 6/07 DUY M. DANG

DDIMARY EXAMINER